

Amendments to the Claims:

Please amend claims 1, 7 and 11 and cancel claims 4, 10 and 12-15 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A receiver for a multi-carrier communication system, the receiver comprising:

a channel corrector for receiving an input signal and a correction control signal to correct an amplitude and a phase of the input signal to obtain a corrected signal, and

a channel estimator ~~comprising~~ comprising:

a slicer for performing a hard-decision on the corrected signal to obtain a decided signal, the correction control signal being dependent on a difference between the input signal and the decided signal to decrease said ~~difference~~ difference;

an initial estimator for estimating an initial estimate of the correction control signal based on pilot symbols in the input signal;

a comparing circuit for comparing the input signal with the decided signal to obtain a difference signal; and

a filter for weighting the difference signal and the initial estimate, wherein the filter is further configured to generate an updated channel estimate, the updated channel estimate being defined as:

$$EC = \alpha NE - (1 - \alpha) IE,$$

where EC is the updated channel estimate, NE is the difference signal, IE is the initial estimate, and α is a predefined value.

2. (previously presented) A receiver for a multi-carrier communication system as claimed in claim 1, wherein the receiver further comprises a Fast Fourier Transform circuit for

supplying the input signal, the input signal representing a phase and an amplitude of a particular received data carrier.

3. (previously presented) A receiver for a multi-carrier communication system as claimed in claim 1, wherein the channel estimator further comprises a comparing circuit for comparing the input signal with the decided signal to obtain a comparison signal, the correction control signal being dependent on said comparison signal.

4. (canceled)

5. (previously presented) A receiver for a multi-carrier communication system as claimed in claim 1, wherein the input signal represents a phase and an amplitude of a particular received data carrier and wherein the decided signal represents a phase and an amplitude of a transmitted carrier corresponding to the particular received data carrier.

6. (previously presented) A receiver for a multi-carrier communication system as claimed in claim 3, wherein the input signal represents a phase and an amplitude of a particular received data carrier and wherein the decided signal represents a phase and an amplitude of a transmitted carrier corresponding to the particular received data carrier, and wherein the comparing circuit compares the phase and the amplitude of the input signal with the phase and the amplitude of the decided signal, respectively, to obtain the correction control signal for controlling the channel corrector to correct the phase and the amplitude of the input signal.

7. (currently amended) A method of receiving a multi-carrier carrier modulated signal, the method comprising:

performing channel correcting, wherein performing channel correcting includes receiving an input signal and a correction control signal to correct an amplitude and a phase of the input signal to obtain a corrected signal, and

performing channel estimation, wherein performing channel estimation

~~includes~~ includes:

performing a hard-decision on the corrected signal to obtain a decided signal, the correction control signal being dependent on a difference between the input signal and the decided signal to decrease said difference;
estimating an initial estimate of the correction control signal based on pilot symbols in the input signal;
comparing the input signal with the decided signal to obtain a difference signal; and
weighting the difference signal and the initial estimate to generate an updated channel estimate, the updated channel estimate being defined as:

$$EC = \alpha NE - (1 - \alpha) IE,$$
where EC is the updated channel estimate, NE is the difference signal, IE is the initial estimate, and α is a predefined value.

8. (original) A multi-carrier communication system comprising a receiver as claimed in claim 1.

9. (previously presented) A wireless multi-carrier communication system comprising a receiver as claimed in claim 1, wherein said system comprises a transmitter for transmitting a modulated multi-carrier high frequent signal via air, and the receiver comprises means for receiving said high frequent signal.

10. (canceled)

11. (currently amended) A receiver for a multi-carrier communication system as claimed in claim-4 1, wherein the channel estimator further comprises an averaging unit configured to average the initial estimate and the difference signal.

12. (canceled)

13. (canceled)

14. (canceled)

15. (canceled)